

REMARKS/ARGUMENTS

Applicants would like to thank the Examiner for the careful consideration given the present application. The application has been carefully reviewed in light of the Office Action, and claim 1 has been amended to more clearly and particularly describe the subject matter that applicants regard as the invention. The following remarks are presented for the Examiner's consideration.

Claims 1-3 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent Document No. JP2000107116 to Kiyoyasu (hereinafter "Kiyoyasu") in view of U.S. Patent No. 4,064,887 to Geiger *et al.* (hereinafter "Geiger *et al.*"). For the following reasons, the rejection is respectfully traversed.

The combination of Kiyoyasu and Geiger *et al.* fails to disclose every feature of the present invention claimed in amended claim 1. As noted in the Office action regarding claim 1, Kiyoyasu fails to teach that the first spray arm (20) essentially extends coaxially with the sump hopper (23), or that the second spray arm (21) is positioned above a sloped panel (22) with its axis of rotation extending at a right angle to said panel as claimed in independent claim 1. Instead, the teachings of Geiger *et al.* are cited as teaching the limitations absent from Kiyoyasu, thereby rendering the invention of claim 1 obvious. However, the combined teachings of Kiyoyasu and Geiger *et al.* fail to teach or disclose a dishwasher including first and second spray arms disposed vertically beneath a rack adjacent to the sloped panel, wherein the first spray arm extends coaxially with the sump hopper and the second spray arm is positioned above the sloped panel with its axis of rotation extending at a right angle to said panel as claimed in amended claim 1. In fact, the only angled sprayer arguably disclosed by the combination of references is suspended above a rack that separates the first and second spray arms. But the angled sprayer arguably disclosed by Geiger *et al.* is not adjacent to the sloped panel or oriented at a right angle relative to any panel as claimed in amended claim 1.

Further, there is no motivation or suggestion in Kiyoyasu or Geiger *et al.* to modify the teachings of Kiyoyasu to include the missing limitations claimed in amended claim 1. Geiger *et al.* is cited as teaching optimized cleaning contact between the dishes and the sprayer resulting from the orientation of the sprayer at an angle as the motivation for angling the spray arm as claimed in amended claim 1. However, neither the passages of Geiger *et al.* cited in the Office action nor any other portion of Geiger *et al.* makes any reference to optimized cleaning of the dishes resulting from an angled spray arm. Instead, the only reference to optimized cleaning in Geiger *et al.* results from the rotation of the spray arm and not from angling the spray arm as claimed in claim 1. See Geiger *et al.*, Col. 1, Lines 17-23.

Moreover, other portions of Geiger *et al.* are cited as teaching the use of an angled second spray arm to avoid contact between the second spray arm and the bottom panel of the dishwasher during operation as the motivation to modify Kiyoyasu according to Geiger *et al.* But again, the cited passages fail to make any reference to angling the second spray arm to avoid contact with the bottom portion of the dishwasher. The angled spray arm in Geiger *et al.* is clearly identified as being an upper spray arm suspended from the upper rack of the dishwasher, well above the non-sloping bottom panel of the dishwasher and separated from said bottom panel by a rack in which dishes are placed to be cleaned. So even assuming that the bottom panel of Geiger *et al.* is sloped, which it is not, there is no motivation provided by Geiger *et al.* to angle the spray arm to avoid contact between that spray arm and the bottom of the dishwasher because such contact in Geiger *et al.* is impossible. Instead, Geiger *et al.* actually teaches away from the invention claimed in amended claim 1 by disclosing a spray arm suspended from an upper rack and oriented such that its axis of rotation forms an angle other than an approximate right angle with the bottom of the dishwasher.

Additionally, the combination of Kiyoyasu and Geiger *et al.* lacks sufficient motivation or suggestion therein to justify the modification of Kiyoyasu according to Geiger *et al.* to teach coaxially alignment of the first spray arm with the sump hopper as claimed in amended claim 1.

Coaxially aligning both a single spray arm and a sump hopper within a dishwasher may be suggested by Geiger *et al.* because the single spray arm, like other components of a dishwasher having only a single spray arm, is likely to be centrally disposed within the dishwasher. However, there is no suggestion or motivation to coaxially arrange one of two spray arms disposed beneath a rack with a sump hopper as claimed in amended claim 1. The teachings of Kiyoyasu, in fact, teach away from the claimed invention by disclosing non-coaxial alignment of one of two spray arms beneath a rack with a sump hopper.

Therefore, even if the teachings of Kiyoyasu and Geiger *et al.* are combined, which would be improper for the reasons explained above, their combined teachings fail to teach every claimed limitation in amended claim 1. For at least the above reasons, the combination of Kiyoyasu and Geiger *et al.* does not render claim 1 obvious, and withdrawal of this rejection is thus respectfully requested.

Regarding the rejection of claim 3, applicants respectfully submit that there is insufficient motivation or suggestion to combine the teachings of Kiyoyasu and Geiger *et al.* as required to establish a rejection under 35 U.S.C. §103(a). In contrast, the teachings of Kiyoyasu and Geiger *et al.* both teach away from the claimed invention. As ¶27 of Kiyoyasu explains, the two spray arms are timed 90° from each other to avoid collisions there between while the spray arms are rotated. Likewise, the two spray arms in Geiger *et al.* rotate in entirely different planes separated by a rack for dishes, making contact between those spray arms physically impossible under any circumstances. Thus, these alternate arrangements of the spray arms eliminate the need and motivation to angle one spray arm to rotate in a plane partially beneath the other to avoid collisions between the spray arms as claimed in claim 3. Thus, for at least the above reasons, the combination of Kiyoyasu and Geiger *et al.* does not render claim 3 obvious, and withdrawal of this rejection is respectfully requested.

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Claim 4 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Kiyoyasu in view of Geiger *et al.*, and further in view of U.S. Patent No. 7,032,604 to Welch (hereinafter “Welch”). For the following reasons, the rejection is respectfully traversed.

The combination of Kiyoyasu, Geiger *et al.* and Welch fails to disclose every feature of the invention claimed in claim 4. Specifically, the combination fails to teach one single rack that serves to accommodate a standard load of dishes. Kiyoyasu discloses only a rack including an upper level, while Geiger *et al.* and Welch both disclose only dishwashers equipped with two or more racks arranged in a vertical configuration. For at least the above reason, the combination of Kiyoyasu, Geiger *et al.* and Welch does not render claim 4 obvious, and withdrawal of this rejection is thus respectfully requested.

The remaining claims in the present application, namely, claims 2, 5 and 6, are allowable for the limitations therein and for the limitations of the claims from which they depend.

In consideration of the foregoing analysis, it is respectfully submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

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If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No. AEG-37595.

Respectfully submitted,
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